

44. (New) The deposition system of claim 38, further comprising a loading station disposed in connection with the mainframe having one or more loading station robots.
45. (New) An electro-chemical deposition system, comprising:
a mainframe having a mainframe wafer transfer robots disposed therein;
a loading station disposed in connection with the mainframe having one or more loading station robots;
two or more processing stations disposed in connection with the mainframe, wherein each processing station comprises two or more electrochemical deposition cells;
two or more cleaning modules connected between the loading station and the mainframe; and
two or more post deposition treatment chambers in connection with the loading station.
46. (New) The deposition system of claim 45, further comprising a pass-through cassette disposed above the cleaning modules.
47. (New) The deposition system of claim 45, wherein a processed substrate is transferred from the one of the electrochemical deposition cells into the pass-through cassette and transferred from the pass-through cassette using the loading station robots to one of the post deposition treatment chambers.

REMARKS

This is intended as a full and complete response to the Office Action dated February 26, 2002. Claims 1-20 are pending in the application and are subject to a restriction and/or election requirement. Applicants have amended claims 1 and 4 to correct matters of form.

The Examiner has restricted the claims to one of the following inventions under 35 U.S.C. § 121 as follows:

- I. Claims 1-11 and 18-20, drawn to an electrochemical deposition system.
- II. Claims 12-17, drawn to a method for depositing metal on a substrate.

The Examiner states that inventions II and I are related as process and apparatus for its practice. More particularly, the Examiner states that "the process as claimed can be practiced by another materially different apparatus, e.g., a plating line wherein the deposition cells are not integrated with cell to cell nor with thermal anneal or SRD chambers, and the apparatus as claimed can be used to practice another and materially different process, e.g., an electro-etching or electroless etching process.

Applicants elect claims 1-11 and 18-20 for prosecution on the merits with traverse. Applicants have amended claim 12 to include the subject matter of claims 1 and 18. Applicants have also added new claims 21-47 to more clearly recite aspects of the invention. Claim 12, as amended, and the new claims (21-47) correspond to the elected subject matter of Group 1. Applicants respectfully request withdrawal of the restriction requirement and respectfully request examination of all claims (1-47).

Respectfully submitted,



Robb D. Edmonds
Registration No. 46,681
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd., Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)

APPENDIX

1. (Amended) An electro-chemical deposition system, comprising:
 - [a)] a mainframe having a mainframe wafer transfer robot;
 - [b)] a loading station disposed in connection with the mainframe;
 - [c)] one or more electrochemical deposition cells disposed in connection with the mainframe; and
 - [f)] a thermal anneal chamber disposed in connection with the mainframe.
4. (Amended) The system of claim 1, further comprising:
 - [e)] a system controller adapted to control operations of one or more components of the electro-chemical deposition system.
12. (Amended) A method for depositing metal on a substrate, comprising:
electro-chemically depositing a metal layer on the substrate within [in an electro-chemical deposition cell disposed on a mainframe of] an electro-chemical deposition system, the electro-chemical deposition system comprising:
a mainframe having a mainframe wafer transfer robot;
a loading station disposed in connection with the mainframe;
one or more electrochemical deposition cells disposed in connection with the mainframe; and
a thermal anneal chamber disposed in connection with the mainframe;
and
annealing the substrate in [a] the thermal anneal chamber disposed in connection with the mainframe [of the electro-chemical deposition system].